

WHAT IS CLAIMED IS:

1. An aqueous disinfectant, comprising:

an aqueous solution of silver citrate wherein the silver is electrolytically generated in a solution of citric acid and water.
2. An aqueous disinfectant as set forth in claim 1, wherein the electrolytically generated silver forms an organic metal complex with the citric acid.
3. An aqueous disinfectant as set forth in claim 1, wherein the electrolytically generated silver forms a chelated organic metal complex with the citric acid.
4. An aqueous disinfectant as set forth in claim 1, wherein the electrolytically generated silver forms a complex with the citric acid of $(Ag(CA)_x)^+ (CA)^-$, wherein CA is $(C_6H_8O_7 - H_2O)$.
5. An aqueous disinfectant as set forth in claim 1, wherein the electrolytically generated silver forms a complex with the citric acid of $(Ag+CA^-)$, wherein CA is $(C_6H_8O_7 - H_2O)$.
6. An aqueous disinfectant as set forth in claim 1, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume.

7. An aqueous disinfectant as set forth in claim 1, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume; and
approximately 0.0005% to 0.001% by volume of silver citrate formed by the electrolytically generated silver.
8. An aqueous disinfectant in concentrated form having an extended shelf-life, comprising:
an aqueous solution of silver citrate wherein the silver is electrolytically generated in a solution of citric acid in water; and
the electrolytically generated silver having a concentration of in excess of 0.05% by volume.
9. An aqueous disinfectant in concentrated form having an extended shelf-life, comprising:
an aqueous solution of silver citrate wherein the silver is electrolytically generated in a solution of approximately 5.0% to 10.0% by volume of citric acid in water; and
the electrolytically generated silver having a concentration of approximately 0.05% to 0.1% by volume.
10. An aqueous disinfectant, comprising:
an aqueous solution of silver citrate in a solution of citric acid and water wherein the concentration of silver citrate exceeds 0.05% by volume.
11. An aqueous disinfectant, comprising:

an aqueous solution of silver citrate formed from electrolytically generated silver in a solution of citric acid and water; and
approximately 20% alcohol by volume.

12. An aqueous disinfectant as set forth in claim 11, wherein the alcohol is approximately 20% ethyl alcohol (ETOH) by volume.

13. An aqueous disinfectant as set forth in claim 11, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume.

14. An aqueous disinfectant as set forth in claim 11, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume; and
the electrolytically generated silver comprising approximately 0.0005% to 0.001% by volume.

15. An aqueous disinfectant as set forth in claim 11, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume; and
the electrolytically generated silver comprising approximately 0.05% to 0.1% by volume.

16. An aqueous disinfectant, comprising:
an aqueous solution of silver citrate formed from electrolytically generated silver in a solution of citric acid and water;

approximately 20% ethyl alcohol by volume; and
approximately 0.01% to 0.1% anionic detergent by volume.

17. An aqueous disinfectant as set forth in claim 16, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume.

18. An aqueous disinfectant as set forth in claim 16, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume; and
approximately 0.0005% to 0.001% by volume of silver citrate formed by the electrolytically generated silver.

19. An aqueous disinfectant as set forth in claim 16, wherein the solution of citric acid and water comprises approximately 5.0% to 10.0% citric acid by volume; and
the electrolytically generated silver comprising approximately 0.05% to 0.1% by volume.

20. An aqueous disinfectant as set forth in claim 16, wherein the detergent is sodium dodecyl sulfate.

21. The process of making a disinfectant, comprising the step of:
electrolytically generating silver in a solution of citric acid and water to formed
an aqueous solution of silver citrate.

22. The process of making a disinfectant as set forth in claim 21, wherein the step of electrolytically generating silver includes forming an organic metal complex with the citric acid.

23. The process of making a disinfectant as set forth in claim 21, wherein the step of electrolytically generating silver includes forming a chelated organic metal complex with the citric acid.

24. The process of making a disinfectant as set forth in claim 21, wherein the step of electrolytically generating silver includes forming a complex with the citric acid of $(Ag(CA)_x)^+ (CA)^-$, wherein CA is $(C_6H_8O_7 - H_2O)$.

25. The process of making a disinfectant as set forth in claim 21, wherein the step of electrolytically generating silver includes forming a complex with the citric acid of $(Ag+CA^-)$, wherein CA is $(C_6H_8O_7 - H_2O)$.

26. The process of making an improved aqueous disinfectant, comprising the step of:

- creating a solution of approximately 5.0% to 10% citric acid in water by volume;
- spacing a positive silver electrode relative to a negative electrode for enabling the solution to be located therebetween;
- applying a potential difference to the positive and negative electrodes to establish a flow of silver ions between the positive and negative electrodes for enabling the silver ions to react with the citric acid to form silver citrate thereby.

27. The process of making an improved aqueous disinfectant as set forth in claim 26, wherein the step of spacing a positive silver electrode relative to a negative electrode includes spacing the positive silver electrode from the from the negative electrode a distance sufficient to enable silver ion flow therebetween.
28. The process of making an improved aqueous disinfectant as set forth in claim 26, wherein the step of spacing a positive silver electrode relative to a negative electrode includes spacing the positive silver electrode greater than 2.0 mm. from the negative electrode.
29. The process of making an improved aqueous disinfectant as set forth in claim 26, wherein the step of applying a potential difference to the positive and negative electrodes includes applying a potential difference to establish a flow of silver ions in the range of 0.1 amperes to 0.5 amperes.
30. An aqueous solution of silver citrate, comprising:
an aqueous solution of silver citrate in a solution of citric acid and water wherein the concentration of silver citrate exceeds 0.05% by volume.
31. The process of making silver citrate, comprising the step of:
electrolytically generating silver in a solution of citric acid and water to formed an aqueous solution of silver citrate.
32. The process of making silver citrate as set forth in claim 31, wherein the step of electrolytically generating silver includes forming an organic metal complex with the citric acid.

33. The process of making silver citrate as set forth in claim 31, wherein the step of electrolytically generating silver includes forming a chelated organic metal complex with the citric acid.
34. The process of making silver citrate as set forth in claim 31, wherein the step of electrolytically generating silver includes forming a complex with the citric acid of $(Ag(CA)_x)^+ (CA)^-$, wherein CA is $(C_6H_8O_7 - H_2O)$.
35. The process of making silver citrate as set forth in claim 31, wherein the step of electrolytically generating silver includes forming a complex with the citric acid of $(Ag+CA)^-$, wherein CA is $(C_6H_8O_7 - H_2O)$.